ABSTRACT OF THE DISCLOSURE

METHOD AND SYSTEM FOR AUTONOMICALLY ADAPTIVE MUTEXES

A method for managing a mutex in a data processing system is presented. For each mutex, an average acquisition cost is maintained that indicates an average consumption of computational resources that has been incurred by threads attempting to acquire the mutex. If a thread attempts to acquire a locked mutex, then the thread enters a spin state or a sleep state based on restrictive conditions and the average acquisition cost value for the mutex at that time. A thread-specific current acquisition cost value is maintained that represents the consumption of computational resources by the thread after the initial attempt to acquire the mutex and prior to acquiring the mutex. When the thread acquires the mutex, the thread-specific current acquisition cost value is included into the average acquisition cost value.